

**Venice Canals**  
Community of Venice  
Los Angeles  
Los Angeles  
California

HAER No. CA-124

HAER  
CAL,  
19-LOSAN  
74-

**PHOTOGRAPHS**

**WRITTEN HISTORICAL AND DESCRIPTIVE DATA**

Historic American Engineering Record  
Western Regional Office  
National Park Service  
U.S. Department of the Interior  
San Francisco, California 94102

HISTORIC AMERICAN ENGINEERING RECORD

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Venice Canals

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**Location:** In the city and county of Los Angeles, California, within the community of Venice. The Venice Canals consist of the public right-of-ways of **Carroll Canal, Linnie Canal, Howland Canal, Sherman Canal, Eastern Canal**, and that portion of **Grand Canal** between North Venice Boulevard and Washington Street.

UTM: A-11.363740.3761410 C-11.363750.3760720  
B-11.363900.3761190 D-11.363380.3761310

Quad: Venice, California

**Date of Construction:** 1905

**Builder:** Augustus Stutzer

**Present Owner:** City of Los Angeles  
200 N. Spring Street  
Los Angeles, CA 90012

**Present Use:** The canals are public property and have remained so since their construction. They are presently used for recreational purposes including boating, although they have been legally withdrawn from public use. The canals also provide habitat and foraging area for aquatic bird species. Walkways adjacent to the canals provide pedestrian access and carious canal-related activities, including nature study and strolling. The canals are scheduled for rehabilitation in 1992.

**Significance:** The Venice Canals are a significant early example of community/recreational planning in a coastal marshland area. The canals are the last remaining portion of a system of canals that was the most important feature of Venice, California. The canals were and are unique in Los Angeles and in California.

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City of Los Angeles  
Bureau of Engineering  
Project Management Division  
Los Angeles, California 90012

**Date:** February 1992

## Background

The Venice Canals are located in the City of Los Angeles, Los Angeles County, California, within the Community of Venice (see Figures 1-2). They are situated just over 1.1 miles north of the Marina Del Rey Small Craft Harbor entrance channel, and one-eighth mile inland from the Pacific Ocean. The canal system contains six shallow, V-shaped canals and the adjacent ten foot-wide public right-of-ways surrounding each. Nine pedestrian bridges and four vehicular bridges span the canals, as does a remnant of a Venice Short Line railroad bridge over the north end of Grand Canal (see Figure 3).

The canals were constructed in 1905 and, as a system, connected to Abbott Kinney's famous "Venice of America" canals to the north. At that time, they functioned as public right-of-ways and were used for recreational and intra-canal boating. However, being poorly constructed of unreinforced concrete, the canal banks began to erode soon after construction. Rapid deterioration of the entire system soon followed. Water began to undermine the sidewalks. The input of eroded bank sediment and sidewalk rubble, along with stormwater runoff, led to a worsening of the water quality. Finally, in 1942, they were legally withdrawn from public use due to severe deterioration of the embankments, sidewalks, and water quality. They remain in a debased state to this day.

In August, 1982, the "Venice Canals Historic District" (as defined in the Statement of Significance section) was placed on the National Register of Historic Places as an early example of community and recreational planning in a coastal marshland area. On August 2, 1982, the district was also declared Los Angeles Historic-Cultural Monument #270 by the City of Los Angeles.

## History

There is perhaps a no more romantic chapter in the history of Los Angeles than the saga of the Venice community. The transformation of the swampy marshlands and lagoons of the pre-1880 Venice area to the cultural mecca of "Venice of America" in the early twentieth century was an unprecedented and inventive era. Even after the fall in stature of the once-resort area, Venice today remains a multi-cultural, exciting, and innovative community.

There is no doubt that the area owes its layout and cultural roots to its proximity to the ocean and ocean-dependent marshes that existed prior to the 1880's. The salt marshes were formerly hunting grounds for the Indians, and later, during the rancho days, the Dons.

In the rancho days, the area was known as Rancho Ballona or Paso de las Carretas. This 13,920 acre rancho was granted in 1839 to Agustin and Ignacio Machados and Felipe and Tomas Talamantes. The



Venice Canals

Figure 1 - Regional Map

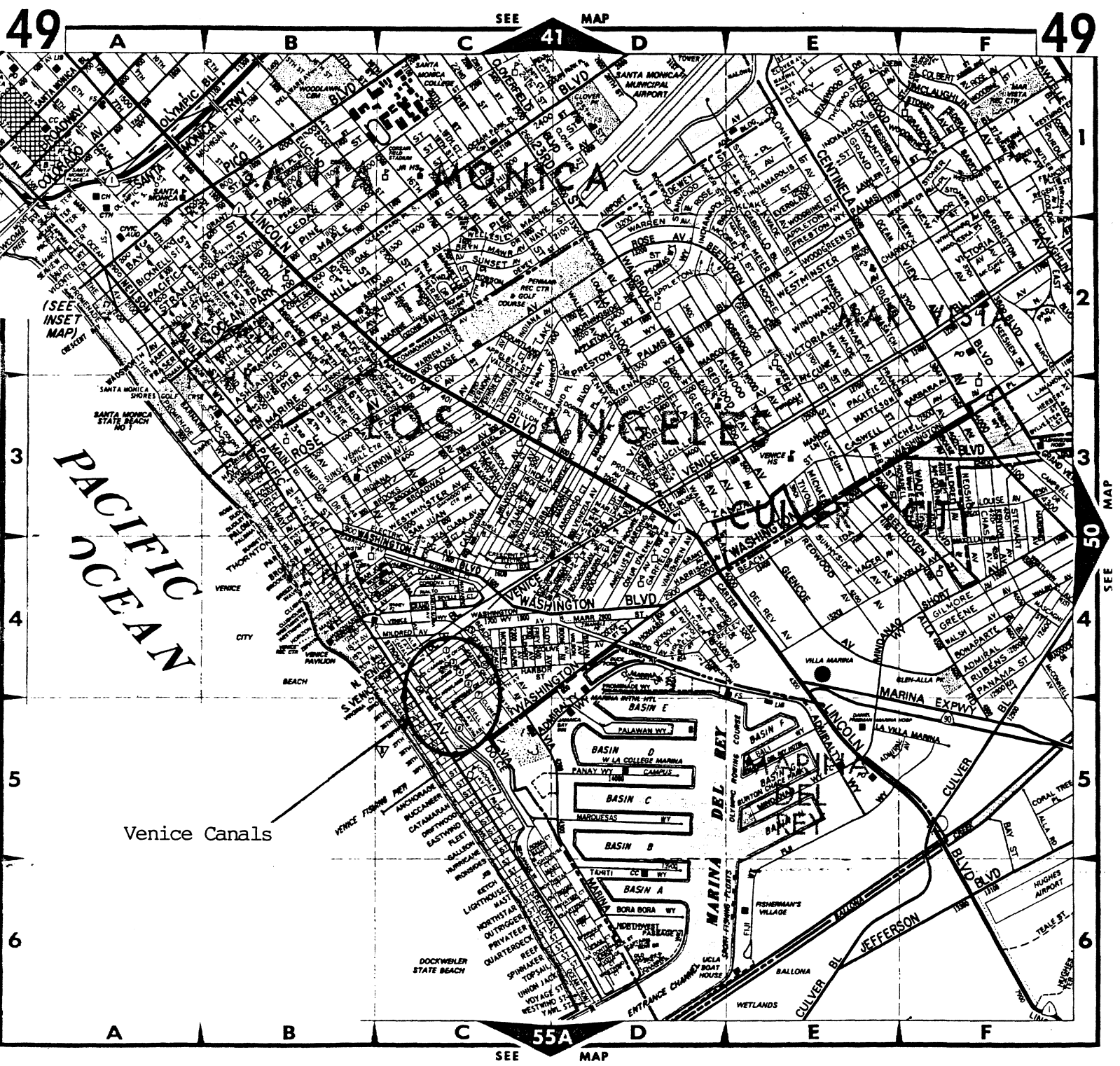


Figure 2 - Vicinity Map

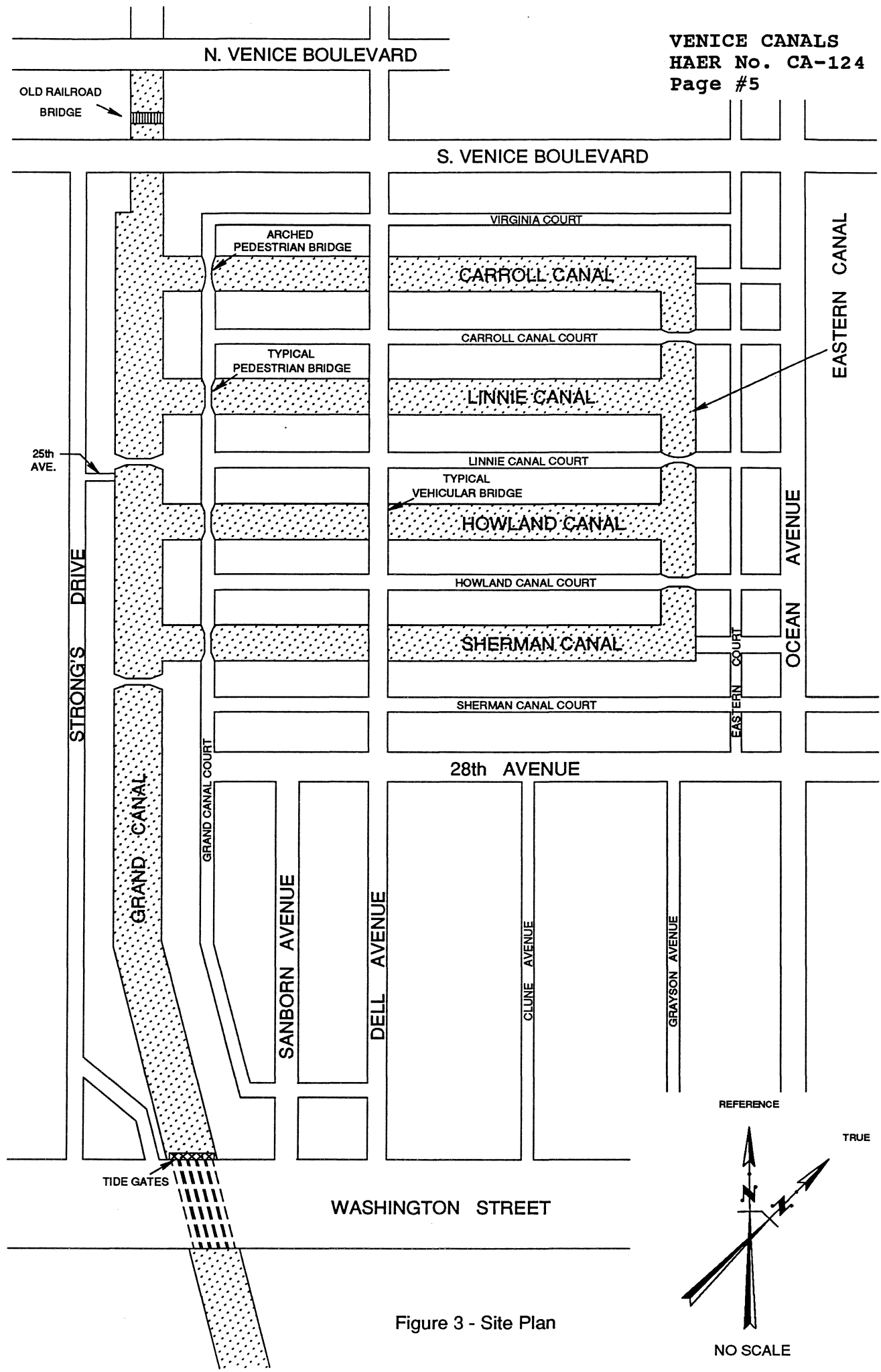


Figure 3 - Site Plan

NO SCALE

rancho was named for the Spanish town, Bayona, which was the ancestral home of the Talamantes family. "El Paso de las Carretas" (the Wagon Pass) was a major feature on the rancho map and this roadway provided the alternative name of the rancho. Washington Boulevard, a major Los Angeles thoroughfare today and the southern limit of the canals, generally follows the path of "El Paso de las Carretas" from the Baldwin Hills west to the ocean. The Machados and Talamantes families used the rancho for cattle grazing and actively participated in the hide trade. In addition to cattle ranching, they planted parts of the rancho in vineyards. After the area became part of the United States, disputes arose over the boundaries of the rancho. Almost 20 years then passed before the rancho finally dissolved.<sup>1</sup>

In the 1870's, the area's status as a hunting ground increased dramatically. Los Angeles sportsmen began coming to the marshes en masse to harvest the bounty of innumerable wildfowl and shellfish. A few "guides" quickly established themselves in the area and furnished everything from guns, ammunition, and boats to fishing tackle, lodging, and "Don Keller's native wines and brandies." Foremost among these entrepreneurs were Will Tell, who operated out of a small cabin he called "Tell's Lookout," and Michael Duffy, who opened "Hunter's Cottage." The popularity of the area as a hunting ground is attested to by the many parties of distinguished guests that patronized the establishments.<sup>2</sup>

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The actual development in the area as we know it today began around the late 1890's when the California Central Railroad (later renamed the Southern California Railroad) constructed a rail line across Rancho La Ballona. In 1901, Henry E. Huntington's Pacific Electric Company constructed a rail line, the Lagoon Line, south to the area from Santa Monica. In 1902, the Los Angeles and Pacific Railway constructed the Venice Short Line from downtown Los Angeles. This line later became an integral part of the Short Line Beach Venice Canal Subdivision Number 1, which encompasses most of the canals.<sup>3</sup> (See page 8.)

Simultaneously with the development of rail lines in the area, Abbott Kinney and his partner, F. G. Ryan, under the title of the Ocean Park Improvement Company, began acquiring lots in the area then known as South Santa Monica to the north of present-day Venice. Small cottages were erected and the area became known as the Ocean Park District. In January of 1904, the Ocean Park Improvement Company was dissolved, with Kinney acquiring a barren tract of marshland to the south of the Ocean Park District.<sup>4</sup> On February 17, 1904, the tract was incorporated along with the Ocean Park District into the City of Ocean Park. In this way, Ocean Park became a sixth class city under the Municipal Corporation Act of 1883. (Note - The City of Ocean Park was renamed the City of Venice on May 29, 1911 at the urging of its founder, Abbott Kinney.<sup>5</sup>

The City of Venice was later consolidated into the City of Los Angeles by Los Angeles Ordinance No. 53068 on November 25, 1925.)

Kinney (See Photo 1), who made his fortune manufacturing Sweet Caporal Cigarettes, wanted to create an American Venice as a citadel of culture on his newly-acquired barren marshland.<sup>6</sup> On May 10, 1904, he presented to the board of city trustees of Ocean Park a plat of his Venice View tract, containing 67 lots.<sup>7</sup> He had big plans for this tract. Being a world traveler, author, and highly cultured man, and having recently returned from a trip to Venice, Italy, Kinney began to envision building a replica of that famous old-world city in his new tract south of the original Ocean Park subdivision. He set about with his dream to create a "Venice of America."<sup>8</sup>

Kinney intended his Venice to be a wonderful beach resort and cultural center, complete with canals, arched bridges, gondolas, plazas, arcaded streets, and buildings of Italian architecture (See Photo 43, Venice of America). He did just that. He began developing a series of connected canals located just north of the present-day canals, in the area north of North Venice Boulevard. Groundbreaking for the canals began on August 15, 1904 amid much doubt and skepticism from the public and officials alike. However, Kinney pressed on and soon the canals were complete. He then went on to build the Venice pier and a breakwater to protect it, a 3600-seat Venice Auditorium, a bath house, and a dance pavilion. On the opening day (July 4, 1905), Venice of America hosted over 40,000 people who were entertained by music, speeches, fireworks, swimming contests, and gondola rides.<sup>9</sup>

The area enjoyed immense popularity for a time, but over the years it began to decline in status. This was in part due to engineering flaws. The canals were poorly designed from an engineering viewpoint and this was attested to by poor water circulation in the canals. The water quality progressively worsened over the years and the canal banks began to erode rapidly. As early as 1912, the State Board of Public Health declared the canals a public menace, unfit to swim in. Finally, they were filled in 1929 by the City of Los Angeles after a long and valiant battle fought by local purists failed to save them from the dumptruck.<sup>10</sup>

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Meanwhile, back in 1904-05 when Kinney's development was yet taking shape, the property owners immediately south of Venice of America began to take notice of the "canal city" to the north. Even while the Venice of America canals were being completed, a movement to develop the property south of Kinney's resort in a similar manner began to take hold.

However, little information is known regarding the persons behind this movement. There are many conflicting reports in the various



historical treatments of the area as to who developed the southerly canals, which are the only remaining canals today. While much has been recorded of Kinney's Venice of America canals to the north, there is a dearth of information as to the origin of today's canals. Among the developers credited for the canals are "Strong's and Dickerson" and "Sherman and Clark." But the available historical evidence does not support either of these contentions. Because of the confusion surrounding this issue, and the apparent lack of existing historical documentation, this document will only put forth facts which can be verified in the historical record.

On June 29, 1905, an area known as the "Short Line Beach Venice Canal Subdivision Number 1" was jointly dedicated by two corporations, The Union Trust & Realty Co. (UTRC), and The Title Insurance & Trust Co. (TITC). This subdivision included most of the area encompassed by the canals and dedicated as public thoroughfares all streets, avenues, and alleys within the subdivision. The original subdivision map includes all of Carroll, Linnie, Howland, and Sherman Canals, and Grand Canal north of Nautilus Avenue (now Washington Street). Eastern Canal, which forms the eastern limit of the canals, is not shown on the original subdivision map. At that time, UTRC and TITC owned all of the land included in the subdivision.<sup>11</sup>

The most common "developer theory" for the canals is that the contracting firm, Strong's and Dickerson, constructed the canals, but this is not supported by research. In fact, no record of this firm's existence was found. However, a real estate company, Strong and Dickinson (different spelling), did play a part in the early days of the canal area after they were constructed. The principals in this company were Frank R. Strong and George W. Dickinson.

Apparently, after UTRC and TITC established the subdivision, they began to sell some of the lots that they owned along the canals. While UTRC and TITC retained ownership over the large majority of lots, a few prominent names appeared in the chain of ownership of some of the lots. Foremost among these was Frank R. Strong (of Strong and Dickinson) and Robert Marsh and Company. The latter obtained approximately 53 lots along Grand and Sherman Canals in 1908.<sup>12</sup> In 1910, Strong and Dickinson and Robert Marsh and Company jointly published a real estate advertisement for the subdivision.<sup>13</sup> See Figure 4 and Photo 2. (note: This advertisement inaccurately depicts portions of the canals extending beyond today's boundaries, and additional short-length canals perpendicular to Grand Canal. There is no record that these short canals existed, or that Eastern Canal extended beyond Carroll or Sherman Canals. It is unclear whether Grand Canal connected to Venice of America by culvert or open channel.)

From this sequence of events, it appears that Strong and Dickinson served as the real estate broker for Robert Marsh and Company and perhaps other landowners in the subdivision after the original

# OCEAN PARK

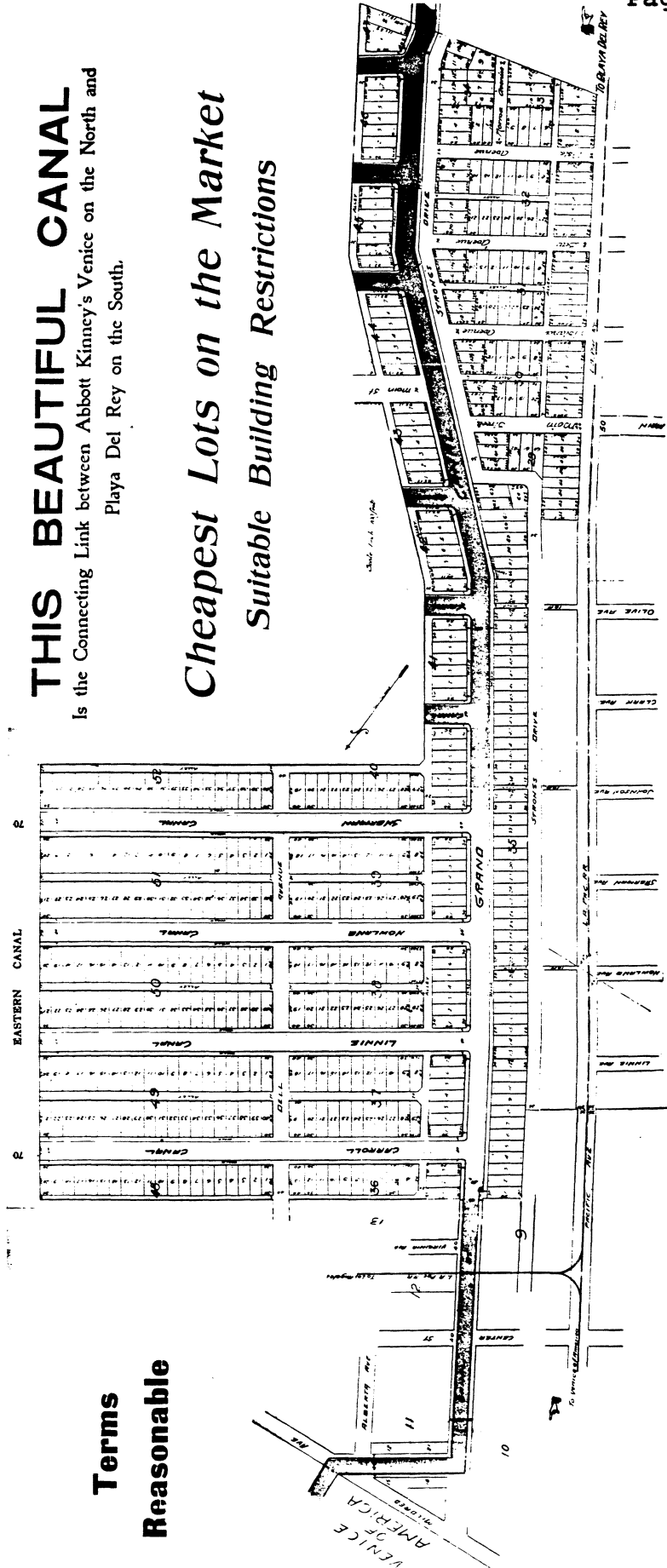
## VENICE CANAL SUBDIVISION

### THIS BEAUTIFUL CANAL

Is the Connecting Link between Abbott Kinney's Venice on the North and Playa Del Rey on the South.

**Terms  
Reasonable**

*Cheapest Lots on the Market  
Suitable Building Restrictions*



**STRONG & DICKINSON**

135 SOUTH BROADWAY, Los Angeles  
Both Phones 1373

VENICE CANALS  
HAER No. CA-124  
Page #9

**Robert Marsh & Co.**

303 H. W. Hellman Building  
Both Phones 2363  
Los Angeles

WILLIAM RYDLEK CO. PRINTING, 1216 SECOND ST.

Figure 4

owners began to sell the lots. However, there is no proof that either Strong and Dickinson or Marsh and Company had a part in the actual development or construction of the canals in 1905. In the absence of definite proof, the impetus for developing the canals should be credited to UTRC and TITC, whom, together, owned all of the land in the subdivision at the time of construction.

It is regrettable that the true chain of events leading to the development of the canals has not been preserved in the historic record. Most records of the area were apparently lost when the City of Ocean Park became Venice in 1911 and was then incorporated into the City of Los Angeles in 1925.

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The actual construction of the canals probably began soon after Kinney's canals opened in July 1905. The canal system consists of four parallel canals, each approximately 1,100 feet long, aligned perpendicular to the Pacific Ocean. From north to south these are named Carroll, Linnie, Howland, and Sherman Canals. These canals are bounded on the west by Grand Canal, which, at the time of construction, was connected to the Venice of America canal system to the north at Mildred Avenue and Ballona Lagoon to the south. Eastern Canal is parallel to Grand Canal and forms the eastern border of the canal system. It extends from Carroll Canal south to Sherman Canal. It is not known who was responsible for the construction of Eastern Canal, or even when it was constructed, since it is not shown on the original subdivision map. Probably, Eastern Canal was included in the original construction of the other five canals, but there are no records to prove this theory. Together, the six canals are today known as the "Venice Canals." (See Photos 3-5.)

The sidewalks along the Venice Canals still bear the "A. Stutzer" contractor's impression (see Photo 6). This man, who's full name was Augustus Stutzer, was responsible for the construction of the sidewalks adjacent to both the Venice Canals and Kinney's Venice of America canals. Since the sidewalks were constructed continuous and integral to the canal embankments, it is highly probable that Stutzer was also responsible for the excavation of the canals themselves. Again, the actual records were not kept or have been lost. Photo 7 shows a portion of the original sidewalk and bank still attached.

The canals were most likely excavated in the same manner as Kinney's canals--with much sweat and blood. Allegedly, an "army of men and teams of horses removed the tons of dirt and sand..., merely piling the dirt up along the banks or building up low-lying areas until the canals were completed.<sup>14</sup> In complete harmony with Kinney's creation, a thin layer of unreinforced concrete was simply laid over the dirt banks of the newer canals. And, likewise, they too began to erode and crumble soon after construction. While the

canals benefitted from having better circulation than Kinney's canals in that they were attached to Ballona Lagoon to the south, it simply wasn't enough of an improvement. Water quality predictably grew worse. This entropic progression continued until, finally, the canals and adjacent walkways were withdrawn from public use by the City of Los Angeles in 1942. The canals have remained in a state of disrepair since. (See accompanying photos of canals.)

Though they remain in a badly deteriorated state today, the canals nearly were destroyed in favor of a more ambitious design in 1957 when construction began on the Marina Del Rey Small Craft Harbor to the south. This resulted in increased pressure by property owners and developers to improve the canals in order to raise property values near the new marina. A groundswell of support began calling for the dredging of the canals to allow for "large pleasure craft dockage and to provide an outlet through the Grand Canal to the ocean." This recommendation was put forth in the Venice Waterways Development package submitted to the city by Koebig and Koebig, Inc. in 1967. A group including Howard Hughes, who owned land near the marina's entrance channel, opposed this plan and subsequently filed suit to stop the development. Although the plan was later dropped, in the mean-time the city officially changed the names of the canals to reflect the "flashy Italian flavor that was to be superimposed onto the then-shabby canals," on May 21, 1969 (Ordinance No. 138457).<sup>15</sup> However, in November of 1976, Mayor Tom Bradley signed Ordinance No. 148989, repealing Ordinance No. 138457 and returning the canal names to their original and present names.

In their heyday, the canals were used, for the most part, in much the same manner as Kinney's northern canals--for boating and intra-canal travel. It is also reasonable to assume that more than one person valued the canals as a swimming and fishing hole as well. After rehabilitation, the canals will be open to all members of the public, per City Council resolution, for boating, strolling, and nature study. Swimming and power boating will be excluded. Although many people from outside the area will no doubt visit the canals, the majority of boaters likely will be canal residents, given the large number of private boat docks currently maintained by residents.

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The canals still await the facelift that will restore them to a measure of beauty while still maintaining their historic integrity. Over the last two decades, first a meandering sidewalk with soil-cement banks was proposed. This was followed in the early 1980's by a near vertical concrete wall plan for the canal banks. Then, a 27° sloped Armorflex precast concrete mat design was rejected by the adjacent property owners and a Loffelstein concrete block system was suggested in its place. The city is currently proceeding with plans to implement the Loffelstein design, with

construction scheduled for late February of 1992 (see Proposed Modification section).

The canals are no longer viewed merely as an historic resource, a reminder of the past. Studies have shown them to be a viable estuarine wetland, in spite of their condition. Many federal and state governmental agencies now exercise jurisdiction over some aspect of the canals and have significant input into any proposed project to rehabilitate them. This input can be direct, such as through a required permit, or it may take the form of recommendations to be imposed through the permitting process. At any rate, any project to enhance the canals has and will face stiff challenges along the way to construction.

### **Physical Appearance**

#### **A. Layout**

The Venice Canals system is composed of six interconnecting waterways designed to reflect the image and ambiance of Venice, Italy (refer to Figure 3). In addition to the canals and their right-of-ways the "Venice Canals Historic District" contains 440 square feet of city-owned land which was formerly railroad right-of-way. Within the right-of-way are small portions of an abandoned railroad bridge which was formerly part of the Venice Short Line (see Photo 8). This bridge lies northerly of South Venice Boulevard on portions of four lots owned by the City of Los Angeles. The canals are approximately one-eighth mile from the Pacific Ocean in an area that is believed to have been originally flat marshland. (See Photos 4 and 5.)

The canal system begins where Grand Canal passes under Washington Street via a set of five culvert/tidegate systems. Grand Canal, which serves as a conduit for water to the remaining canals, extends north by northwest approximately 2,250 feet to its terminus north of South Venice Boulevard. From north to south, Carroll, Linnie, Howland, and Sherman Canals extend east by northeast, perpendicular to Grand Canal. Eastern Canal, which is parallel to Grand Canal, forms the eastern border of the canal system with Carroll Canal on the north and Sherman Canal on the south as its limits. The east-west canals are equally spaced so as to form three interior rectangular islands of equal size within the canals. These islands provide residential sites adjacent to the canals in addition to the sites around the canals' perimeter. None of the residential sites are included in the historic district, which is described in the Statement of Significance section.

#### **B. Structure**

The canals total 7500 linear feet and are 50 feet wide within a 70-foot right-of-way throughout most of the canal system. However, Grand Canal is somewhat narrower (40 feet) where it passes under

the North and South Venice Boulevard roadways. Grand Canal is approximately 2,250 feet in length within the canal system, while Eastern Canal is approximately 850 feet in length. The four parallel canals are approximately 1,100 feet in length.

The canals were constructed as open three-sided channels having a shallow V-shaped cross section with 45 degree (1:1) sloped embankments and were lined with clay. See Photo 44 - Cross section of Grand Canal (not to scale, representative of all six canals). When originally constructed, they were 5 feet deep in the center, and 3 feet deep at the edges. Integral concrete banks and sidewalks were constructed along both sides of each canal. The original concrete sidewalks along Grand Canal were ten feet in width, while the remaining canal sidewalks were eight feet in width. (See Photos 9 and 10.)

To provide access to the three islands formed by the canal system, four identical concrete vehicular bridges (see photo 11) on Dell Avenue and nine pedestrian bridges throughout the canal system were constructed. Presently, there are two arched pedestrian bridges spanning Carroll Canal at Grand Canal Court and Eastern Canal at Linnie Canal Court. The bridge over Grand Canal at 25th Avenue was previously an arched bridge also. Original plans for these three are shown in Photos 45 and 46, (Plan Sheets B-190 and B-191). From notes on Plan Sheet B-191, evidently a bridge of unknown design already existed over Grand Canal at 25th Avenue and was removed with the construction of the arched bridge. Because of differing notes on Plan Sheets B-190 and D-5117 (Photos 45 and 47), it is not known if these three arched bridges were constructed in 1907 or 1924 (both dates are mentioned on the plans).

The original three arched bridges were altered by the placement of auxiliary supports in 1926 (see Photos 48 and 49, Plan Sheets B-138). The bridge over Grand Canal at 25th Avenue was then replaced by a steeply sloped, three-span timber bridge in 1939 (see Photo 47, Plan Sheet D-5117). This bridge still exists today (see Photo 21). The other two arched bridges, with their auxiliary supports, remained until 1979 and can be seen in Photos 12 and 23. They were then replaced by the current bridges per Plan Sheets D-26357 and D-26358 (Photos 50-57) and are shown in Photos 13 and 24.

The best evidence, or lack of it, suggests that the other six pedestrian bridges, which are three-span timber bridges, are original (see Photos 15-20, 22, and 26). There are no existing plans for these bridges nor is there any definite record of when they were constructed.

The canals and the seven existing three-span bridges are now severely deteriorated (the two arched bridges are structurally sound). In 1942, the canals were withdrawn from public use due to already severe deterioration of the canal embankments and adjacent sidewalks. However, residents and the general public continue to use them for strolling and limited recreational boating.

## Biology

The Venice Canals and surrounding area support a variety of plant species. There are some native plant species in the canal area, but a number of introduced species exist due to the residential nature of the area. The predominant tree species of the canal area are older ornamentals such as acacia, palms, and bottlebrushes. Along the canals, many types of ornamental flowering plants have been added by homeowners in an attempt to improve the look of the degraded canals. In many places, the embankments have filled with invasive species such as ice plant and other weedy plants. Wetland vegetation such as pickleweed and saltgrass has been found in limited numbers along the water's edge. A green alga is the dominant flora of the water column.

Throughout their length, the canals support a fairly large number of fish representing at least seven species. According to a 1986 study, the following species were found in the canals: topmelt, California killifish, bay pipefish, longjaw mudsucker, arrow goby, diamond turbot, and striped mullet. The study found twelve taxa of invertebrates in the canals as well.<sup>16</sup>

In addition to a sizeable number of domestic ducks and geese, the canals are used by a number of other aquatic bird species. Species such as green-backed heron, snowy and great egrets, belted kingfisher, Forster's tern, pied-billed and western grebes, and double-crested cormorants have been seen on recent surveys by the author. It is reasonable to expect that during spring and fall migration, virtually any species of waterfowl or shorebird that typically migrates along the Pacific Flyway may be found in the canals. However, the urban nature of the canals probably serves to minimize their use by migrating waterbirds. The federal and state endangered California least tern has been noted in the area, however there is no evidence of substantial use of the canals by this species at any time of the year.<sup>17</sup>

## Hydrology

Water and sediment quality of the canals is generally poor due to the introduction of organic and inorganic pollutants into the canal system via urban runoff. Sea water, which enters the canals through the tidegates at Washington Street, is supplied by the Ballona Lagoon/Grand Canal connection to Marina Del Rey. Water circulation and tidal exchange within the canals is hindered by their configuration and also by silt, debris, and rubble deposited on canal bottoms and in the tidegate culverts. This has also had a negative aesthetic effect on the canals.

Originally, the canals were connected uninterruptedly to the ocean to the south by the Ballona Lagoon natural watercourse. At that time, they were subject to the tidal cycles, although the tidal

regime was apparently very limited due to the long distance (1.2 miles) to the ocean and shallow water depth. This is evidenced by the historically poor water quality as discussed above, both in the Venice Canal and Venice of America systems, which were hydrologically attached at Mildred Avenue.

Today, tidal flushing of the canal system is regulated by two sets of culvert/tidegate systems. The first set is located in Ballona Lagoon at Via Marina (at the Marina Del Rey entrance channel, 1.2 miles to the south) and is operated by the Los Angeles County Department of Public Works. (Note - this tidegate is not part of the canal system). It consists of one open culvert (two others are now sealed) under the Via Marina roadway and is regulated by an automatic tidegate. It serves to separate the Ballona Lagoon from the Marina del Rey entrance channel and Pacific Ocean. The Via Marina tidegates were built in 1938 by the U.S. Army Corps of Engineers, concurrent with the construction of Ballona Creek.

The second set of tidegates, which are within the canal system, consists of 5 culverts equipped with slide gates located in Grand Canal under the Washington Street roadway. These tidegates were first installed in 1937, using 36-inch Galvanized Model 104 Calco Slide headgates anchored to the existing concrete wall (See Photo 58, Plan Sheet D-4514). The gates were replaced in 1957 using 36-inch slide Gates, Model 101-F, Armco Drainage and Metal Products, Inc. (See Photo 59, Plan Sheet D-13360).

In 1977, the Washington Street tidegates were retrofitted to allow automatic or manual operation. In March of 1989, the tidegates (see Photo 27) were replaced and the control system restored to provide full manual or automatic operation, including automated sensing components (See Photos 60-61, Plan Sheets D-28451).

Ballona Lagoon and the Venice Canals are used to store floodwaters during major winter storms, and the operation of the gates during severe weather conditions is designed to prevent flooding to low-lying structures in the area. Normally, the tidegates are operated in such a way that provides flood protection while providing adequate water levels for boating. In order to keep the canals' water quality relatively high, the tidegates are opened and the canals flushed every one or two weeks, as needed or allowed by the tidal cycle. The city has contracted with a hydrological consulting firm to recommend the optimum tidal regime which will maximize the competing interests of flood protection, water quality, and recreation.

#### Ownership

The canals are public property, and are owned and maintained by the City of Los Angeles. They have remained intact since their 1905 construction with the same basic cross-section and design details, despite some neglect and deterioration over the years.



The property adjacent to the canals is privately owned and has gone through a number of changes through the years. Architectural evidence suggests that there are probably no more than two structures in the canal area that date from the first decade of this century. A large percentage (possibly 40 percent) of the residences have been built in the last ten years. The remainder is divided between circa 1925-35 cottages and 1950's stucco-covered apartment buildings. The nature and variety of the buildings along the canals can be seen in the accompanying photographs of the canals. The mix of housing stock is so great that privately owned property was not included in the historic district designation as it would detract from the recognition and importance of the canals themselves.

#### **Statement of Significance**

*(taken, in part, from Bruce and Branan, 1978)*

The Venice Canals Historic District is significant as an early example of community/recreational planning in a coastal marshland area. The historic district contains the only remaining portion of the Venice of America/Venice Canals system constructed in Venice in the early 1900's. Between July, 1929 and February, 1930, all canals north of North Venice Boulevard, i.e. the Venice of America canals, were filled in, leaving only the canals that remain today.

Early development in the area was facilitated by the development of mass public transportation from the central part of Los Angeles. The Interurban trolley system between Los Angeles and Santa Monica was constructed in 1896 and extended southward through the Venice area to Redondo Beach by 1900. The Venice Short Line was constructed in 1902 by the Los Angeles and Pacific Railway. This pattern of development illustrates the relationship between construction of the railway transportation system of that era and the concurrent community planning and land development by the operators of the Los Angeles and Pacific Railways, Moses Sherman and Eli Clark.

Although this pattern of land development was repeated in many areas of Los Angeles County by the Los Angeles and Pacific Railway and other railways which eventually became part of the Pacific Electric system headed by Henry E. Huntington, the particular development of Venice of America and the Short Line Beach Venice Canal Subdivision Number 1 was unique. The attempt to create a beach resort patterned after the canal system of Venice, Italy interfaced well with the particular geographical nature of the marshland adjacent to the outlet of Ballona Creek. The canals were intended to convey a sense of historic cohesiveness through community planning based upon the canal system. Such a canal system appears to be unique to both the local area as well as to the State of California. Although the original Abbott Kinney canals were filled in beginning in 1929, the six canals which constitute the Venice Canals Historic District still remain.

Likewise, the Short Line Beach Venice Canal Subdivision Number 1 has, due to its unique canal system, remained distinct from densely built surrounding neighborhoods.

Though boundary lines were chosen to exclude private property and include only the canals and canal right-of-ways, there are now many encroachments and intrusions into the historic district that were constructed by private property owners along the canals. These include chain-link and picket fences, decks, bulkheads, and docks. The northern boundary extends along Grand Canal to North Venice Boulevard, which is the end of the present canal system. The southern boundary extends along Grand Canal to Washington Street, which was the original boundary line for Short Line Beach Venice Canal Subdivision Number 1. The boundary lines also include bridge approaches of the abandoned Venice Short Line Railway bridge. As mentioned above, the Short Line Railway was an integral part of Short Line Beach Venice Canal Subdivision Number 1, and the bridge is therefore included within the boundary lines.

Although both portions of the Venice Canal system both north and south of Washington Street have historical significance, they have been treated as distinct and separate for contemporary geographic and procedural reasons. The proposed rehabilitation project (see Proposed Modifications section) will not impact the Grand Canal south of Washington Street.

The area north of Washington Street consists of Carroll Canal, Sherman Canal, Eastern Canal, Howland Canal, Linnie Canal, and a 2,250-foot long section of Grand Canal. South of Washington Street is found the approximately 2,100-foot long remainder of Grand Canal, which empties into the Ballona Lagoon, a natural channel which extends roughly 3,600 feet further before terminating at the Marina del Rey entrance channel.

#### **Alterations and Additions**

Over the years a number of changes occurred. Kinney's original canals were filled with dirt and paved over in 1929 after several failed earlier attempts. Oil was discovered in the Venice area that same year and Grand Canal south of Washington Street became lined with producing oil well towers. North of Washington Street, the area remained residential although oil pollution intruded into the waterways. While the oil towers have long since been removed south of Washington Street, today the areas north and south of Washington Street are still distinct and separate. Grand Canal does not flow unimpeded to Ballona Lagoon but is fed under Washington Street through culverts and is regulated by tidegates, which were first installed in 1937 (32 years after construction of the canals).

Except for a few vacant lots, the area north of Washington Street is almost completely developed with residential housing along the canals. The area along Grand Canal south of Washington Street is

also highly developed, though not as extensively.

The original poured concrete vehicular bridges on Dell Avenue still exist today. However, as discussed previously, some of the pedestrian bridges have been replaced, altered, or both during the past sixty years. See photos of bridges in accompanying display.

**Verbal Boundary Description**  
(taken from Bruce and Branan, 1978)

Beginning at the intersection of the west line of Canal Street, being 60 feet wide, and the south line of North Venice Boulevard, being 50 feet wide, then easterly to the intersection of the south line of North Venice Boulevard and the east line of Canal Street, then southerly along the east line of Canal Street to a line parallel to and distant 71 feet northerly from the north line of South Venice Boulevard, being 40 feet wide, then easterly along said line 5 feet, then southerly along a line parallel to and distant 5 feet easterly from the east line of Canal Street to a line parallel to and distant 27 feet northerly from the north line of South Venice Boulevard, then westerly along said line 5 feet to the east line of Canal Street, then southerly along the east lines of Canal Street and Grand Canal, being 69.93 feet wide, to the north line of Carroll Canal, then easterly along the north lines of Carroll Canal, being 70 feet wide, and Eastern Canal to the east line of Eastern Canal, then southerly along the east line of Eastern Canal, being 70 feet wide to the south line of Eastern Canal, then westerly along the south lines of Eastern Canal and Sherman Canal, being 70 feet wide, to the east line of Grand Canal, then southerly along the east line of Grand Canal, being 70 feet wide, to the north line of Washington Street, then westerly to the intersection of the west line of Grand Canal with a line parallel to and distant 50 feet northerly from the center line of Washington Street, then northerly along the west line of Grand Canal, being 70 feet wide south of Linnie Canal and 69.93 feet wide north of Linnie Canal, to the north line of Grand Canal, then easterly along the north line of Grand Canal to the west line of Canal Street, then northerly along the west line of Canal Street to a line parallel to and distant 28 feet northerly from the north line of South Venice Boulevard, then westerly along said line 5 feet, then northerly along a line parallel to and distant 5 feet westerly from the west line of Canal Street to a line parallel to and distant 72 feet northerly from the north line of South Venice Boulevard, then easterly along said line 5 feet to the west line of Canal Street, then northerly along the west line of Canal Street to the point of beginning.

The district excludes three islands containing public and private land within the above boundary. These exclusions are bounded as follows:

1. Beginning at the intersection of the east line of Grand Canal with the south line of Carroll Canal, then easterly along the south line of Carroll Canal to the west line of Eastern Canal, then southerly along the west line of Eastern Canal to the north line of Linnie Canal, then westerly along the north line of Linnie Canal, being 70 feet wide, to the east line of Grand Canal, then northerly along the east line of Grand Canal to the point of beginning.
2. Beginning at the intersection of the east line of Grand Canal with the south line of Linnie Canal, then easterly along the south line of Linnie Canal to the west line of Eastern Canal, then southerly along the west line of Eastern Canal to the north line of Howland Canal, then westerly along the north line of Howland Canal, being 70 feet wide, to the east line of Grand Canal, then northerly along the east line of Grand Canal to the point of beginning.
3. Beginning at the intersection of the east line of Grand Canal with the south line of Howland Canal, then easterly along the south line of Howland Canal to the west line of Eastern Canal, then southerly along the west line of Eastern Canal to the north line of Sherman Canal, then westerly along the north line of Sherman Canal, being 70 feet wide, to the east line of Grand Canal, then northerly along the east line of Grand Canal to the point of beginning.

The streets, boulevards, and canals described above are shown on District Maps 105A145, 105A147, 106.5A145, and 106.5A147 prepared by the City Engineer of the City of Los Angeles, California.

#### **Proposed Modification**

The City of Los Angeles proposes to rehabilitate the Venice Canals with a Loffelstein (Loffel) Concrete Block System. The canal embankments will be lined with Loffelstein stacked concrete blocks at a 55° slope. Along the bottom of the slope will be a gravel safety bench sloped at 11.3°. This bench will provide an area of shallow water along the bottom of the embankments to reduce the chance of accidental drownings. Each Loffel block is constructed with an open cell for placing earth material and vegetation and performs in conjunction with other blocks as a gravity retaining structure. 1.5-foot planting strips with adjacent 4.5-foot sidewalks will be constructed at the top of the embankments. (See Photo 62, Plan Sheet D-29976, #3.)

Each Loffel block placed along the top two rows of the embankment will be filled with "class A" top soil and the top three rows of blocks will be formed with holes along the bottom sufficient to allow for plant-root penetration. The remaining blocks below these rows will be filled with gravel. The top two rows of blocks will

be planted with pickleweed and salt grass and possibly other wetland vegetation species after construction.

The canals will be excavated of sediment and rubble and, excepting their embankments, will be returned to their original configuration. At the design water level (+2.00 feet Mean Sea Level [MSL]) of the rehabilitated canals, the water depth will be one foot along the bottom of the embankments and five feet at the center of the canals. The width of the canals will remain roughly 50 feet for most of the canals' length. The canal bottoms will remain earthen.

A segment of Grand Canal between North and South Venice Boulevard will be entirely restored to its original configuration. This will represent the original design thereby providing a readily accessed visual representation of the historic canal design. The segment will have the original 45° embankments with six-foot concrete sidewalks adjacent to the top of the slopes. An existing portion of the sidewalk containing the "A. Stutzer" contractor stamp will be placed in the new sidewalk in this area. A public boat launching ramp will be located along the western embankment north of the old railroad bridge and south of North Venice Boulevard. (See Photo 63, Plan Sheet D-29976, #25.)

One and one-half inch diameter polyvinyl chloride (PVC) conduit to be installed under and along the planting strips adjacent to the sidewalks will allow for a possible future sidewalk lighting system. PVC conduit with spigots at set intervals will also be installed to facilitate watering of the vegetation.

There are nine existing pedestrian bridges over the canals. Seven of the nine bridges are three-span timber bridges; these have been deemed structurally unsound by the Bureau of Engineering and will be replaced as part of the canal rehabilitation project. In order to replicate the historic ambiance of the canal system, six of the seven will be replaced in kind. See Photo 64, Plan Sheet D-29887, #2. The bridge over Grand Canal at 25th Avenue (see Photo 21) was originally an arched wooden bridge, as discussed previously; it will be replaced with an arched bridge similar to the two existing arched bridges (see Photo 65, Plan Sheet D-29887, #10). Those two remaining arched bridges, constructed with laminated timber and steel, span Carroll Canal at Grand Canal Court and Eastern Canal at Linnie Canal Court. They are structurally sound and will remain in place.

If residents wish to do so, they may construct boat docks in the canals after the canal rehabilitation is complete. A coastal development permit from the California Coastal Commission will be necessary for such construction. All docks are to conform to the maximum size limits to be specified by the Bureau of Engineering.

The project is designed so as to address coastal wetland, biologic, recreation, public access, safety, maintenance, and aesthetic

issues while still incorporating the historical amenities agreed to in the Memorandum of Agreement (MOA) between the U.S. Army Corps of Engineers, the National Advisory Council on Historic Preservation, and the City of Los Angeles. In fulfillment of the MOA ratified by the afore-mentioned agencies, the final project will include an interpretive effort which will include signs and plaques. The historical re-creation of a canal segment in the original canal design and the perpetuation of the "A. Stutzer" contractor's stamp, as described above, were required by the MOA.

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#### NOTES

<sup>1</sup>Patricia Adler, *A History of the Venice Area, A Part of the Venice Community Plan Study*. (Los Angeles: Department of City Planning, 1969), p. 1-3.

<sup>2</sup>The History of Venice and Its Founder, *Venice Vanguard*, 19 July, 1913, p. 9-16.

<sup>3</sup>Adler, p. 1-3.

<sup>4</sup>The History of Venice and Its Founder, *Venice Vanguard*, 19 July, 1913, p. 9-16.

<sup>5</sup>Richard Bigger, James D. Kitchen, *How the Cities Grew*, The Haynes Foundation, Los Angeles, 1952, p. 124.

<sup>6</sup>The History of Venice and Its Founder, *Venice Vanguard*, 19 July, 1913, p. 9-16.

<sup>7</sup>Luther A. Ingersoll, *A Century History of Santa Monica Bay Cities*, (Los Angeles: L.A. Ingersoll, 1908), p. 332.

<sup>8</sup>Adler, p. 9.

<sup>9</sup>Annette Del Zoppo, Jeffrey Stanton, *Venice California 1904-1930*, (Venice: ARS Publications, 1978), p. 3, 28.

<sup>10</sup>Del Zoppo, et al, p. 31, 57.

<sup>11</sup>*Short Line Beach Venice Canal Subdivision Number One*, (Los Angeles: Los Angeles County Hall of Records, 1905), Book 7, p. 126-127.

<sup>12</sup>*Ibid.*, p. 126-127.

<sup>13</sup>*Ocean Park, Venice Canal Subdivision*, (Los Angeles: Kistler Company, 1910?).

<sup>14</sup>Del Zoppo, et al, p. 2.

<sup>15</sup>Barbara Ann Stabnow, *Venice and the Canals, The Evolution of a Unique Urban Landscape*, (California State University, Northridge, for Proseminar, Geography 490B), 24 May, 1979, p. 16-17.

<sup>16</sup>C. Robert Feldmeth, Ph.D., *Biological Resources of the Venice Canals*, (Claremont, CA: Ecological Research Services, 1986), p. 1-10.

<sup>17</sup>Charles T. Collins, Ph.D., *Avifauna of the Venice Canals*, (California State University, Long Beach, 1986), p. 1-10.

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